International Patent Application No. PCT/GB2004/000094
Applicant: Spirax-Sarco Limited

STATEMENT UNDER ARTICLE 19(1)

Claim 1 is amended to clarify that the inlet to the vortex chamber is disposed tangentially, and that the resulting rotational flow creates a low pressure region into which opens the escape aperture. Corresponding amendment will be made in due course in the description, in the paragraph beginning at line 5 on page 2.

US-A1-3037518 discloses a steam trap having a trap chamber into which inlets emerge axially. Consequently, no rotational flow is promoted to generate a low pressure region adjacent the outlet.

Claims

1. A condensate trap comprising a vortex chamber, an inlet and a single outlet, the inlet being disposed to admit fluid into the chamber in a tangential direction with respect to the longitudinal axis of the chamber so as to promote a rotational flow of the fluid in the chamber about the longitudinal axis, thereby to generate a low pressure region within the fluid, and the outlet comprising an escape aperture situated at an axial end of the chamber so as to open into the low pressure region in operation of the condensate trap.

2. A condensate trap as claimed in claim 1, wherein at least a portion of the vortex chamber is cylindrical.

3. A condensate trap as claimed in claim 1 or 2, wherein at least a portion of the vortex chamber is frusto conical.

4. A condensate trap as claimed in claims 2 and 3, wherein the cylindrical portion adjoins the wider diameter end of the frusto conical portion.

5. A condensate trap as claimed in claim 4, wherein the inlet opens into the cylindrical portion.

6. A condensate trap as claimed in claims 3 to 5, wherein the escape aperture is disposed at the narrower end of the frusto conical portion.

7. A condensate trap as claimed in any one of the preceding claims, wherein the escape aperture is situated on the longitudinal axis of the vortex chamber.

FILE COPY

World Intellectual Property Organization
34 chemin des Colombettes
CH-1211 Geneva 20
Switzerland

16 August 2004

Our ref: P83302PC00/JRC

Dear Sirs

International PCT Application No. PCT/GB2004/000094
Spirax-Sarco Limited

With reference to the communication dated 22 June 2004, I file herewith a replacement page 14 for this application.

Claim 1 is amended. The other claims on page 14 are unchanged.

A Statement under Article 19(1) is also enclosed.

Please acknowledge receipt of this letter and its enclosures.

Yours faithfully

John Cheyne, for
Haseltine Lake

Claims

1. A condensate trap comprising a vortex chamber, an inlet and a single outlet, the inlet being disposed to admit fluid into the chamber in a tangential direction with respect to the longitudinal axis of the chamber so as to promote a rotational flow of the fluid in the chamber about the longitudinal axis, thereby to generate a low pressure region within the fluid, and the outlet comprising an escape aperture situated at an axial end of the chamber so as to open into the low pressure region in operation of the condensate trap.

2. A condensate trap as claimed in claim 1, wherein at least a portion of the vortex chamber is cylindrical.

3. A condensate trap as claimed in claim 1 or 2, wherein at least a portion of the vortex chamber is frusto conical.

4. A condensate trap as claimed in claims 2 and 3, wherein the cylindrical portion adjoins the wider diameter end of the frusto conical portion.

5. A condensate trap as claimed in claim 4, wherein the inlet opens into the cylindrical portion.

6. A condensate trap as claimed in claims 3 to 5, wherein the escape aperture is disposed at the narrower end of the frusto conical portion.

7. A condensate trap as claimed in any one of the preceding claims, wherein the escape aperture is situated on the longitudinal axis of the vortex chamber.